



**NORTH AMERICAN AEROSPACE DEFENSE COMMAND  
AND  
UNITED STATES NORTHERN COMMAND**



General Terrence J. O'Shaughnessy  
Commander, NORAD and USNORTHCOM  
250 Vandenberg Street Ste B016  
Peterson AFB CO 80914-3801

FEB 11 2020

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington DC 20515

Dear Mr. Chairman

As the Commander of North American Aerospace Defense Command (NORAD) and U.S. Northern Command (USNORTHCOM), I am responsible for defending the homeland from attack—the top priority of the National Defense Strategy. As you know, a capable homeland defense is both the foundation of effective deterrence and essential to our nation's ability to conduct global operations.

Our homeland is not a sanctuary. Russia and China are of particular concerns as they hold targets in the United States at risk today with nuclear, conventional, and cyber weapons systems. NORAD and USNORTHCOM have taken aggressive steps to improve our homeland defense, and I continue working with the Service Chiefs to increase our capabilities to outpace the threats facing our nation. For your consideration, I am including a prioritized list of unfunded requirements for the FY21 budget (details in attachment) that are focused on my most pressing needs of increasing our domain awareness and establishing a layered homeland defense architecture.

Thank you for the opportunity to share our requirements with the Committee and for your enduring support of NORAD and USNORTHCOM.

Sincerely

TERRENCE J. O'SHAUGHNESSY  
General, USAF  
Commander

Attachment: NORAD and USNORTHCOM FY21 Unfunded Priority List

cc: The Honorable William M. "Mac" Thornberry, Ranking Member  
Secretary of Defense  
Chairman of the Joint Chiefs of Staff

## NORAD and USNORTHCOM FY21 Unfunded Priority List

1. Arctic Communications (\$130M): The funds requested provide an initial Arctic communication capability.
  - Explanation: The funds requested support Polar Communications experiments and the fielding of prototype terminals using systems, such as the SpaceX STARLINK and ONEWeb space internet constellation. These experiments will also incentivize commercial industry to prioritize launches to polar coverage. Future funding (\$110M) is required in FY22 for full coverage.
  - LIN: N/A                      PE: 0604858F                      SAG: N/A
  
2. Sentry Radar (\$20M): The funds requested provide an elevated sentry radar for point defense of critical infrastructure and force deployment areas.
  - Explanation: Sentry provides an elevated, discriminating system capable of mid-range detection, tracking and positive identification of low radar cross-section targets of interest such as cruise missiles and unmanned aerial systems.
  - LIN: 193                      PE: 0607210D8Z                      SAG: N/A
  
3. Persistent Elevated Intelligence, Surveillance, and Reconnaissance (ISR) (\$5M): The funds requested provide for the development and prototyping of a persistent elevated ISR for point defense locations within the CONUS.
  - Explanation: This system would provide radar coverage to pair with the expected defeat mechanisms under development. The funds would be provided to Air Force Research Lab. Future funding is required in FY22 and beyond.
  - LIN: N/A                      PE: 0602204F                      SAG: N/A
  
4. COBRA Dane (CD) Service Life Extension Program (SLEP) (\$31M): The funds requested provide further replacement of transmitter group, traveling wave tubes, and a mainframe computer (\$18.517M in RDT&E funds and \$12.50M in Procurement).
  - Explanation: With delays of the Hawaii and Pacific radars, CD must be operational longer than the planned life expectancy of 2030. The FY21 funds requested accelerate the planned SLEP. Future funding is required.
  - LIN: 838010                      PE: 120387F                      SAG: 012A